

DEFINITIONS

agencies	The U.S. Department of Energy, the U.S. Environmental Protection Agency, and the State of Idaho—the three agencies responsible for the scope and schedule of remedial investigations and cleanup activities at the Idaho National Engineering and Environmental Laboratory (INEEL).
ancillary equipment	Any device including, but not limited to, piping, fittings, flanges, valves, and pumps used to distribute, meter, or control the flow from its point of generation to: (1) an underground storage tank, an aboveground storage tank, or treatment tank(s), (2) between hazardous waste storage and treatment tanks to a point of disposal onsite, or (3) a point of shipment for disposal offsite.
aquifer	Layer of water-saturated rock or soil through which water flows in a quantity useful to people. The rate of flow depends upon porosity, permeability, and slope of the water table.
area of contamination	A continuous extent of generally dispersed contamination at a superfund site.
CERCLA	(Comprehensive Environmental Response, Compensation, and Liability Act). Federal law that establishes a program to identify, evaluate, and remediate sites where hazardous substances may have been released (leaked, spilled, or dumped) to the environment.
cultural resources	Include but are not limited to (1) prehistoric, historic, and ethnohistoric archaeological materials (artifacts) and sites on the ground surface or buried beneath it, (2) standing structures and associated components more than 50 years old or of importance because they represent a major historical theme or era, (3) cultural and natural places, select natural resources, and sacred objects important to Native Americans and other ethnic groups, and (4) American folk life traditions and arts.
deactivation	The process of placing a facility in a stable condition to minimize existing risks and the related life-cycle cost of a surveillance and maintenance program that is protective of workers, the public, and the environment.
decommissioning	A phase where the facility is taken to its ultimate end state through decontamination or dismantlement to demolition or entombment.
decontamination	The process of removing contamination at U.S. Department of Energy facilities. “Contamination” refers to both radioactive contamination and to hazardous substance contamination.
end state	Physical condition when cleanup actions are complete.

FFA/CO	(Federal Facility Agreement and Consent Order). Agreement among the U.S. Department of Energy, U.S. Environmental Protection Agency, and State of Idaho that establishes a process and schedule to evaluate potentially contaminated sites at the INEEL, to determine if remediation is warranted, and then to select and implement a remedy.
groundwater	Water below the land surface in a zone of saturation.
hazard index	A ratio between the contaminant intake concentrations and the concentrations that are not likely to cause adverse health effects, even to sensitive populations such as pregnant women or children.
hazardous waste	A solid waste identified as hazardous in federal regulations (Resource Conservation and Recovery Act).
high-level waste	The highly radioactive material resulting from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid material derived from such liquid waste that contains fission products in sufficient concentrations, and other highly radioactive material that the Nuclear Regulatory Commission, consistent with existing law, determines by rule requires permanent isolation.
historic building or structure	A building or structure, including Goodale's Cutoff, WWII canals, reactors, reactor control panels, WWII concussion walls, and shielded locomotive, that is eligible to the National Register of Historic Places.
INEEL	The 890-square-mile Idaho National Engineering and Environmental Laboratory Site, including DOE operations at the Site and supporting operations in Idaho Falls.
injection well	A well into which fluids are injected.
institutional controls	Generally includes all nonengineered restrictions on activities or on access or exposure to land, groundwater, surface water, waste and waste disposal areas, and other areas or media. Some common examples of tools to implement institutional controls include restrictions on use or access, zoning, governmental permitting, public advisories, and installation master plans. Institutional control commitments are necessary at sites where contamination levels prevent unrestricted and unlimited use.
long-term stewardship	All activities necessary to protect human health and the environment after remediation, disposal, or stabilization of a site or part of a site. The INEEL expanded the scope of long-term stewardship to include conservation of ecological and cultural resources and awareness of technology changes in addition to surveillance and maintenance of remedies.

low-level waste	Waste that contains radioactivity and is not classified as high-level waste, transuranic waste, spent nuclear fuel, or Atomic Energy Act Section 11 (e)(2) by-product material (e.g., uranium or thorium mill tailings) by U.S. Department of Energy Order 435.1 (2001). Test specimens of fissionable material irradiated for research and development only and not for the production of power or plutonium may be classified as low-level waste, provided the concentration of transuranic isotopes are less than or equal to 100 nCi/g.
mg/L	milligrams per liter. A milligram is one-thousandth of a gram (10^{-3}).
mixed low-level waste	Low-level waste that also contains hazardous waste subject to the Resource Conservation and Recovery Act.
mixed waste	Waste containing both radioactive and hazardous waste.
nCi/g	nanocuries per gram. A nanocurie is one-billionth of a curie (10^{-9}).
off-Site	Off the INEEL Site.
pCi/g	picocuries per gram. A picocurie is one-trillionth of a curie (10^{-12}).
pCi/L	picocuries per liter. A picocurie is one-trillionth of a curie (10^{-12}).
perched water	Water that collects above a layer of relatively impermeable material, such as clay, and then slowly moves downward to the aquifer; perched water zones are often present beneath reservoirs and industrial facilities but disappear when the surface water source is eliminated.
radioactive waste	Solid, liquid, or gaseous material that contains radionuclides regulated under the Atomic Energy Act of 1954, as amended, and that is of negligible economic value considering recovery costs.
radionuclide	Alternate forms or isotopes of an element that are unstable and decay by giving off energy in the form of radioactivity.
RCRA	(Resource Conservation and Recovery Act). Federal waste management law. Its regulations govern the management (transportation, treatment, storage, and disposal) of solid waste and the generation, accumulation, recycling, and handling of hazardous waste. RCRA waste includes material listed on one of the U.S. Environmental Protection Agency's hazardous waste lists or material that meets one or more of the U.S. Environmental Protection Agency's four characteristics: ignitability, corrosivity, reactivity, or toxicity.
record of decision	An agreement among the agencies that explains which remedies will be used at a site and why. The responsiveness summary contains public comments on proposed actions and the agencies' responses.

remedial action objectives	Objectives for the cleanup remedy that specify contaminants and media of concern, potential exposure pathways, and remediation goals.
remediation	Process of cleaning up, to an acceptable level of risk, a site where a hazardous or radioactive substance has been released.
residual contamination	Amount of a hazardous or radioactive pollutant remaining in the environment after a natural or technological remediation process.
RI/FS	(remedial investigation/feasibility study). Identifies contaminants in an area, assesses the risk they pose to human health and the environment, and evaluates remedial options.
risk assessment	The process of estimating the current and future adverse health impacts to humans and the environment.
secondary containment system	An impervious system that will contain all of the contents of a tank and has residual space adequate to contain any other material that could be expected to accumulate before the secondary containment is emptied.
spent nuclear fuel	Fuel that has been withdrawn from a nuclear reactor following irradiation.
transuranic waste	Radioactive waste containing more than 100 nCi/g of alpha-emitting transuranic isotopes, with half-lives greater than 20 years.
unexploded ordnance	Military munitions that have been primed, armed, or fused and fired; dropped; or launched but through malfunction or design have failed to explode. Unexploded ordnance poses a physical risk to human safety through the danger of explosion when it is handled or contacted, especially by machinery.
vadose zone	Unsaturated layers of rock and soil extending from the ground surface down to the water table, or aquifer. Contaminants move at different rates through the vadose zone depending on how they react with the rock and sedimentary material.
vapor vacuum extraction	Technology that extracts vapor from beneath the ground by inducing a vacuum in wells located at specific depths. The vacuum forces underground vapors to flow toward the well and up into an aboveground treatment system.

wetland

A wetland is any geographic area that exhibits three characteristics indicating that the area is wet, at least periodically. Wetlands do not necessarily appear to have freestanding water. The wetland determination is based on soil moisture content, type of plant life, and type of soil.

µg/L

micrograms per liter. A microgram is one-millionth of a gram (10^{-6}).

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